

REMARKS

In response to the Official Action of August 4, 2005, claims 1, 11 and 16 have been amended in a manner which is believed to particularly point out and distinctly claim the invention in a manner which distinguishes the claimed invention over the cited art including US patent 6,269,087, Nakamura et al (hereinafter Nakamura).

Claim 1 is rejected as anticipated in view of Nakamura on the grounds that Nakamura discloses all of the steps of said claim. In view of the amendment of claim 1, it is respectfully submitted that Nakamura does not anticipate or suggest claim 1.

In particular, Nakamura describes a handover type judgment scheme for a CDMA mobile communication system which is capable of judging an appropriate type of handover from multiple types of handover available. It is thus primarily concerned with determining if a handover should be made and, if so, whether the handover should be one of several types including a same frequency soft handover, a different frequency soft handover, or a hard handover.

Nakamura describes a series of embodiments wherein handover type judgment schemes are described in detail. Thus, in a first embodiment the mobile station selects a handover type which has the weakest handover start condition amongst the multiple types of handover available, wherein the mobile station selects a handover type which has the weakest handover start condition dependent on the received level difference and when the condition is satisfied, the mobile station notifies this situation to the base station so as to carry out the selected type of handover.

In particular, Figure 3 of Nakamura is a graph explaining handover start conditions for three types of handovers used in a handover type judgement scheme for a CDMA mobile communication system according to the described invention. It

is seen in Figure 3 that the level difference for selecting different handovers is determined by the “perch channel receiving level only.” As explained in Nakamura at column 1, lines 27-34, the perch channel is the pilot channel that each base station transmits and is therefore comparable to the principal transmission frequency that each base station in each cell of a GSM cellular system uses in addition to additional transmission frequencies, with the former being transmitted at maximum power and the latter being subject to variable power control (see patent specification at page 7, lines 19-27). Thus, there is no disclosure or suggestion in Nakamura of a system in which a mobile station and two or more cell site units each capable of communicating by radio with the mobile station on at least two communication channels having different frequencies is utilized and wherein the mobile station is in traffic communication on a traffic communication channel with at least two of the cell site units. Furthermore, there is no disclosure or suggestion in Nakamura that the mobile station receives signals for each of said two or more cell site units on each of the at least two communication channels. Nakamura also does not disclose or suggest that the mobile station determines an estimate of the level of interference with signals on each of the at least two communication channels for each of said two or more cell site units.

The above differences are now particularly recited in amended claim 1 which has been amended to make clear in the preamble that each of the two or more cell site units are capable of communicating by radio with the mobile station on at least two communication channels and also amending the first two steps of claim 1 to particularly point out that the mobile station receives signals for each of said two or more cell site units on each of the at least two communication channels and further that the mobile station determines an estimate of the level of interference with signals on each of the at least two communication channels for each of said two or more cell site units.

Furthermore, in Nakamura, as described at column 5, lines 59 onwards, the mobile station measures the downlink radio channel state and determines if it is possible to carry out each type of handover or not. Nakamura describes a situation where a particular type of handover cannot be carried out because of variable conditions such as the case where the interference receiving level of the frequency bandwidth currently used for the communication at the mobile station is greater than a prescribed threshold level. In such a case, the mobile station in Nakamura selects a handover type which has the weakest handover start condition excluding the type for which it is not possible to carry out handover.

Thus, although interference of a channel is measured in Nakamura, there is no disclosure within the mobile station of determining an estimate of the level of interference with signals on each of the at least two communication channels for the cell site nor of communicating to the handover controller, the estimate of the level of interference with signals on each of the two communication channels for each of the two or more cell site units as presented in amended claim 1.

For all of these reasons, it is respectfully submitted that claim 1 is not anticipated by Nakamura.

Furthermore, Nakamura describes at column 6, line 59 onwards that each base station measures interference receiving level for the total receiving level of each frequency bandwidth that is implemented at that base station and then compares the measured value with a prescribed threshold value at the control unit. It should be noted that this measurement is carried out at the base station rather than at the mobile station. In addition, this technique in Nakamura is similar to the above mobile station measurements where the received power is used to determine when a handover is required and the interference measurement determines which type of handover is available. This situation is therefore different from the steps of measuring a level of interference with signals of each of the at

least two communication channels at the mobile station for each of the two or more cell site units and handing over traffic communication of the mobile station on the basis of the estimate of the level of interference with signals on each of the at least two communication channels. It is therefore further submitted that claim 1 is not anticipated by Nakamura nor is it suggested by the handover type judgment scheme disclosed in Nakamura.

Furthermore, independent mobile station claim 11 has been amended in a manner similar to that of claim 1 and, for similar reasons, is believed to be neither anticipated nor suggested by Nakamura.

Furthermore, independent method claim 16, which is rejected as obvious in view of Nakamura further in view of US patent 6,138,019, Trompower et al (hereinafter Trompower), is believed to be distinguished over the cited art in view of the amendment to claim 16 for the same reasons with respect to Nakamura. Thus, the fact that Trompower may teach that the mobile station stores an indication of the timing difference between signals on the communication channels, does not render claim 16 obvious in view of the fact that the previously recited steps are not disclosed or suggested by Nakamura.

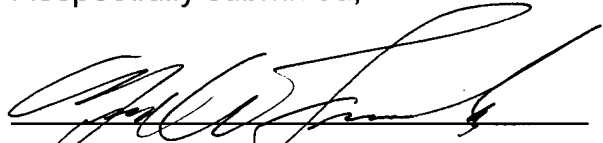
It is therefore also respectfully submitted that claims 2-5 and 7-10, which ultimately depend from amended claim 1, are further distinguished over Nakamura. In addition, claims 12-15, which ultimately depend from amended claim 11, are believed to be further distinguished over Nakamura taken alone or in combination with the additionally cited art, including Trompower and US patent 5,493,563, Rozanski et al (hereinafter Rozanski).

Finally, claims 17 and 18, are also believed to be distinguished over Nakamura in view of Rozanski, due to their dependency from amended claim 16.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

The undersigned respectfully submits that no fee is due for filing this Amendment. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', is written over a horizontal line.

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